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EXAMINER

ELPENORD, CANDAL

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/531,489 | Applicant(s) PARANTAINEN, JANNE | |
| | Examiner CANDAL ELPENORD | Art Unit 2416 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,6,9,17 and 20-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6,9,17 and 20-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on April 15, 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 23, 2009 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. **Claims 1-5, 22-28** are rejected under 35 U.S.C. 103(a) as being unpatentable over by 3GPP TR 23.846 1.2.0 (09/2002)-3rd generation Partnership Project for Multimedia Broadcast/Multicast Service; Architectures and Functional Description.

Regarding claim 1, 3GPP discloses a method comprising receiving a packet flow identifier associated to multicast/broadcast multimedia service or a group of terminals (see, mobile group identify when group of joins multicast group and announcement of multicast transmissions, page 26, paragraph 6.11, page 27, section 6.13, section 6.5, page 19, see, distribution of MBMS QoS over the MBMS distribution tree to multiple users, page 28, section 6.14.2)) over a Gb interface (page 10, see MBMS architecture where the GGSN, SGSN communicatively coupled to Multicast/Broadcast source via the Gb interface, section 5.2) to create a packet flow context for said multicast/broadcast multimedia service or group of terminals (see, MBM broadcast service activation and creation of MBMS context based on MBMS identifier, page 32, section 7.1.2, page 41, section 7.2.1), creating the packet flow context for said multicast/broadcast multimedia service or group of terminals identified by said packet flow identifier (see, MBM broadcast service activation and creation of MBMS context based on MBMS identifier, page 32, section 7.1.2, page 41, section 7.2.1), and transferring service data of the multicast/broadcast multimedia service over the Gb interface by utilizing said packet flow context (see, section 7.2.1, sending of MBMS context with group identifier parameter, page 10, see MBMS architecture where the GGSN communicatively coupled to Multicast/Broadcast source via the Gb interface, section 5.2)).

In view of what it is disclosed in the 3rd GGP document, one skilled in the art would have been able to arrive at the Applicant claimed. Further, one skilled in the art would be motivated to send the created MBMS context over the Gb interface in order to

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provide MBMS services to as many groups as possible since the Gb interface has a bigger resource than a conventional interface.

Regarding claim 2, 3GPP discloses the method further comprising mapping the packet flow context to an appropriate logical channel (see, mapping of MBMS or multicast/broadcast transmissions over distinct group of GTP tunnels, page 28, section 6.14.3.2) indicated by a service announcement of the multicast/broadcast multimedia service (see, service announcement/discovery section 6.13, page 27).

Regarding claim 5, 3GPP discloses the method, wherein terminals in said group of terminals belong to a same multicast group ((see, distribution of MBMS QoS over the MBMS distribution tree to multiple users, page 28, section 6.14.2, see, MBMS notification to users within MBMS service area, page 33, section 7.1.3, items 2-3).

Regarding claim 6, 3GPP discloses the method, wherein terminals in said group of terminals (see, distribution of MBMS QoS over the MBMS distribution tree to multiple users, page 28, section 6.14.2) receive data from a common source (page 41, fig. 19, see MBMS data source (i.e. BM-SC) which is used for the activation of MBMS Multicast service, section 7.2.1, paragraph 4).

Regarding claim 9, the method, wherein transferred data of the multicast/broadcast multimedia service is identified on the basis of said packet flow identifier (see, reception of MBMS context based on group identifier, page 41, section 7.2.1-6).

Regarding claim 22, 3GPP discloses a method comprising creating a packet flow context for a multicast/broadcast multimedia service or group of terminals identified by said packet flow identifier (see, mobile group identify when group of joins multicast group and announcement of multicast transmissions, page 26, paragraph 6.11, page 27, section 6.13, section 6.5, page 19, see, distribution of MBMS QoS over the MBMS distribution tree to multiple users, page 28, section 6.14.2, see, MBM broadcast service activation and creation of MBMS context based on MBMS identifier, page 32, section 7.1.2, page 41, section 7.2.1), mapping the packet flow context to an appropriate logical channel indicated by a service announcement of the multicast/broadcast multimedia service (see, service announcement/discovery informing the users of the range of services, section 6.13, page 27), and receiving service data of the multicast/broadcast multimedia service over a Gb interface (see, section 7.2.1, sending of MBMS context with group identifier parameter, page 10, see MBMS architecture where the GGSN communicatively coupled to Multicast/Broadcast source via the Gb interface, section 5.2)).

In view of what it is disclosed in the 3rd GGP document, one skilled in the art would have been able to arrive at the Applicant claimed. Further, one skilled in the art would be motivated to send the created MBMS context over the Gb interface in order to provide MBMS services to as many groups as possible since the Gb interface has a bigger resource than a conventional interface.

Regarding claim 23, the method, further comprising delivering the service data of the multicast/broadcast multimedia service (see, section 7.2.1, sending of MBMS context with group identifier parameter, page 10, see MBMS architecture where the GGSN communicatively coupled to Multicast/Broadcast source via the Gb interface, section through an air interface to the terminals (see, MBMS architecture showing multiple users coupled to the lu interface, fig. 1, section 5.2).

Regarding claim 24, the method, wherein terminals in said group of terminals (see, distribution of MBMS QoS over the MBMS distribution tree to multiple users, page 28, section 6.14.2) belong to a same multicast group (see, distribution of MBMS QoS over the MBMS distribution tree to multiple users, page 28, section 6.14.2, see, MBMS notification to users within MBMS service area, page 33, section 7.1.3, items 2-3).

Regarding claim 25, the method, wherein terminals in said group of terminals (see, distribution of MBMS QoS over the MBMS distribution tree to multiple users, page 28, section 6.14.2) receive data from at least one common source (page 41, fig. 19, see MBMS data source (i.e. BM-SC) which is used for the activation of MBMS Multicast service, section 7.2.1, paragraph 4).

Regarding claim 26, the method, wherein said creation of the packet flow context comprises receiving a packet flow context request (see, section 7.1.1, page 31 to page 32, in particular , see MBMS service activation request with group Id in fig. 11) MBMS service activation including the packet flow identifier and transmitting a response to the packet flow context request (see, MBMS context response as shown in fig. 11, page 32).

Regarding claim 27, the method, further comprising deleting the created packet flow context for said multicast/broadcast multimedia service or group of terminals identified by said packet flow identifier (see, user initiated MBMS service deactivation/deletion where the user send a deactivation MBMS context request, section 7.1.5, page 39), wherein said deletion comprises receiving a packet flow context request including the packet flow identifier and transmitting a response to the packet flow context request (fig. 17, see, delete/deactivation context response of MBMS service, section 7.1.5, section 7.2.5.3, page 48).

Regarding claim 28, the method, wherein transferred data of the multicast/broadcast multimedia service is identified on the basis of said packet flow identifier (see, reception of MBMS context based on group identifier, page 41, section 7.2.1-6).

5. **Claims 17-21, 34-40** are rejected under 35 U.S.C. 103(a) as being unpatentable over Alakoski et al (US 2004/0073928 A1) in view of Toth et al (US 2005/0053068 A1).

Regarding claims 17, 34, Alakoski '928 discloses method/ a apparatus (fig. 1, System for providing broadcast/multicast services, paragraph 0036, 0009), comprising processor (fig. 3 to fig. 4, see SGSN. GGSN performing activation and creation of MBMS context based on QoS attributes) configured to define a packet flow identifier associated to at least one multicast/broadcast multimedia service MBMS service or a group of terminals ("service attributes for each stream, target QoS and packet filter", paragraph 0043, "broadcast service attribute", paragraph 0010, lines 3-10, see,

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information identifying a MBMS service associated with the context, paragraph 0012, lines 2-7, fig. 3, UE 50, SGSN 54 and GGSN 56), send a message (fig. 3, see Activation MBMS Context Request, paragraph 0041, lines 1-12) including the packet flow identifier to create a packet flow context (fig. 3, see Activation MBMS Context Request, paragraph 0041, lines 1-12) for said multicast/broadcast multimedia service MBMS service (see, creation of MBMS contexts based on the target QoS, packet filter, paragraphs 0042-0043) or group of terminals identified by said packet flow identifier (see, "the use equipment /mobile station requesting an MBMS session", paragraph 0032), transfer service data of the multicast/broadcast multimedia service MBMS wherein the packet flow context is utilizable for routing the service data of the multicast/broadcast multimedia service over the Gb interface (see, "sending the packet of an application flow over an interface", paragraph 0040, lines 1-20).

Regarding claims 18, 35, Alakoski '928 discloses the apparatus (fig. 1, System for providing broadcast/multicast services, paragraph 0036, 0009), further configured to perform flow control of said service data of said multicast/broadcast multimedia service at least on packet flow context (see, "for QoS control of a PDP context, an indication of the maximum allowable QoS for the PDP context", paragraphs 0029, 0030, lines 2-5) and base station system general packet radio service protocol virtual connection levels prior to transmission (fig. 2, MBMS-SC service center communicating the information with respect to the service area for each stream, target QoS, and packet filter, paragraphs 0031, see, transmission of packet based on the QoS, over any interface, paragraph 0040, lines 2-20).

Regarding claims 19, 36, Alakoski '928 discloses the apparatus (fig. 1, System for providing broadcast/multicast services, paragraph 0036, 0009), wherein said flow control further comprises a level located between said packet flow context and base station system general packet radio service protocol virtual connection levels (fig. 2, MBMS-SC service center communicating the information with respect to the service area for each stream, target QoS, and packet filter, paragraphs 0031, see, transmission of packet based on the QoS, over any interface, paragraph 0040, lines 2-20), said level comprising at least one block where to at least one packet flow context is logically connected (fig. 3, GGSN node, see MBMS context creation).

Regarding claims 20, 37, Alakoski '928 discloses the apparatus (fig. 1, System for providing broadcast/multicast services, paragraph 0036, 0009), wherein said message to create a packet flow context (fig. 3, see Activation MBMS Context Request, paragraph 0041, lines 1-12) is sent from a first network entity substantially comprising a serving general packet radio service support node (fig. 3, SGSN 54 sending activation request for a mobile station, paragraph 0041, lines 1-12) and is sent to a second network entity (fig. 3, MBMS service center 60) substantially comprising a global system for mobile/enhanced data rates for global evolution radio access network (fig. 3, RAN/Radio Access Network, paragraph 0041, lines 1-12).

Regarding claims 39, 40, Alakoski '928 discloses the apparatus (fig. 1, System for providing broadcast/multicast services, paragraph 0036, 0009), further configured to receive an acknowledgement message in response to sending said message to create

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a packet flow context (see, start notification message in the form of an Ack, paragraph 0048).

Alakoski '928 discloses all the claimed limitations with the exception of being silent with respect to claimed features:

Regarding claims 17, 34, transferring service data of the multicast/broadcast multimedia service over Gb interface.

Regarding claims 18, 35, Gb interface.

Regarding claim 38, wherein said Gb interface comprises an interface between said apparatus comprising a second-generation packet switched core network and a radio access network providing radio access for said group of terminals.

However, Toth '068 from the same field of endeavor discloses the above claimed features:

Regarding claims 17, 34, transferring service data of the multicast/broadcast multimedia service (see, reception/transmission of multicast data context, paragraphs 0046, 0048, 0052, 0071, 0079-0081, 0095-0096) over Gb interface (fig. 1, see Iu/Gb interface communicatively the SGSN node to the Radio Access network in which group of mobile terminals connects, paragraph 0050).

Regarding claims 18, 35, Gb interface (fig. 1, see Iu/Gb interface communicatively the SGSN node to the Radio Access network in which group of mobile terminals connects, paragraph 0050).

Regarding claim 38, wherein said Gb interface comprises an interface between said apparatus comprising a second-generation packet switched core network and a

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radio access network providing radio access for said group of terminals (fig. 1, see Iu/Gb interface communicatively the SGSN node to the Radio Access network in which group of mobile terminals connects, paragraph 0050).

In view, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching features of Alakoski '928 by incorporating teaching features (i.e. Gb interface) as taught by Toth '068 in order to transmit MBMS service data context over the Gb interface which in turn provides the highest possible access rates in relation to the bandwidth.

6. **Claims 22-26, 28, 29-31, 33** are rejected under 35 U.S.C. 103(a) as being unpatentable over Alakoski et al (US 2004/0073928 A1) in view of Toth et al (US 2005/0053068 A1).

Regarding claims 22, Alakoski '928 discloses a method (fig. 1, System for providing broadcast/multicast services, paragraph 0036, 0009) creating a packet flow context for a multicast/broadcast multimedia service (see, creation of MBMS contexts based on the target QoS, packet filter, paragraphs 0042-0043) or group of terminals identified by said packet flow identifier ("service attributes for each stream, target QoS and packet filter", paragraph 0043, "broadcast service attribute", paragraph 0010, lines 3-10, see, information identifying a MBMS service associated with the context, paragraph 0012, lines 2-7), mapping the packet flow context to an appropriate logical channel indicated by a service announcement of the multicast/broadcast multimedia service (see, response to a join request indicating the service area, target QoS for each

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stream, paragraph 0044), and receiving service data of the multicast/broadcast multimedia service for routing the service data of the multicast/broadcast multimedia service (see, "sending the packet of an application flow over an interface", paragraph 0040, lines 1-20) from a first network entity (fig. 3, SGSN 54 sending activation request for a mobile station, paragraph 0041, lines 1-12) to a second network entity (fig. 3, MBMS service center 60).

Regarding claim 29, Alakoski '928 discloses an apparatus (fig. 1, System for providing broadcast/multicast services, paragraph 0036, 0009), comprising a processor (fig. 3 to fig. 4, see SGSN, GGSN performing activation and creation of MBMS context based on QoS attributes) configured to create a packet flow context for said multicast/broadcast multimedia service (see, creation of MBMS contexts based on the target QoS, packet filter, paragraphs 0042-0043) or group of terminals identified by a packet flow identifier paragraphs 0042-0043) or group of terminals identified by said packet flow identifier ("service attributes for each stream, target QoS and packet filter", paragraph 0043, "broadcast service attribute", paragraph 0010, lines 3-10, see, information identifying a MBMS service associated with the context, paragraph 0012, lines 2-7, map the packet flow context to an appropriate logical channel indicated by a service announcement of the multicast/broadcast multimedia service (see, response to a join request indicating the service area, target QoS for each stream, paragraph 0044), and receive service data of the multicast/broadcast multimedia service for routing the service data of said multicast/broadcast multimedia (see, "sending the packet of an

application flow over an interface", paragraph 0040, lines 1-20).

Regarding claims 23, 30, Alakoski '928 discloses the method, further comprising delivering the service data of the multicast/broadcast multimedia service through an air interface to the terminals (see, transmission of the data packet of an application service flow over an air interface, paragraph 0040, lines 2-20, fig. 3, SGSG, and GGSN nodes).

Regarding claim 25, Alakoski '928 discloses the method, wherein terminals in said group of terminals (fig. 2, SGSN and GGSN node receiving MBMS service, paragraph 0040, lines 1-20) receive data from at least one common source (fig. 2, MBMS service 30, paragraph 0039).

Regarding claim 26, 31, Alakoski '928 discloses the method wherein said creation of the packet flow context comprises receiving a packet flow context request including the packet flow identifier (fig. 3, see Activation MBMS Context Request, paragraph 0041, lines 1-12) and transmitting a response to the packet flow context request (fig. 3, see Join Response and MNMS Context Creation).

Regarding claim 28, 33, Alakoski '928 discloses the method, wherein transferred data of the multicast/broadcast multimedia service is identified on the basis

of said packet flow identifier (fig. 3 to fig. 4, see MBMS creation and Activation based service attributes (service area for each stream, packet filter and target QoS).

Alakoski '928 from the same field of endeavor discloses all the claimed limitation with the exception of being silent with respect to claimed features:

Regarding claims 22, 29, receiving service data of the multicast/broadcast multimedia service over a Gb interface.

Regarding claim 24, the method, wherein terminals in said group of terminals belong to a same multicast group.

However, Toth '068 from the same field of endeavor discloses the above claimed features:

Regarding claims 29, 30, receiving service data of the multicast/broadcast multimedia service (see, reception/transmission of multicast data context, paragraphs 0046, 0048, 0052, 0071, 0079-0081, 0095-0096) over Gb interface (fig. 1, see Iu/Gb interface communicatively the SGSN node to the Radio Access network in which group of mobile terminals connects, paragraph 0050).

Regarding claim 24, the method, wherein terminals in said group of terminals (fig. 1, see Iu/Gb interface communicatively the SGSN node to the Radio Access network in which group of mobile terminals connects, paragraph 0050).

belong to a same multicast group (fig. 1, see group of mobile terminals (i.e. M1 and M2) communicatively coupled to the MG7 for receiving multicast context from the same stream, paragraphs 0044, 0046, 0050).

In view, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching features of Alakoski '928 by incorporating teaching features (i.e. Gb interface) as taught by Toth '068 in order to transmit MBMS service data context over the Gb interface which in turn provides the highest possible access rates in relation to the bandwidth.

7. **Claims 27, 32** are rejected under 35 U.S.C. 103(a) as being unpatentable over Alakoski et al (US 2004/0073928 A1) in view of Toth et al (US 2005/0053068 A1) as applied to claim 22, 29 above, and further in view of Gilchrist et al (US 7,042,855 B1).

Alakoski '928 and Toth '068 disclose all the claimed limitation with the exception of being silent with respect to claimed features: a processor is further configured to delete the created packet flow context for said multicast/broadcast multimedia service or group of terminals identified by said packet flow identifier, wherein said deletion comprises receiving a packet flow context request including the packet flow identifier and transmitting a response to the packet flow context request.

However, Gilchrist '855 from the same field of endeavor discloses the above claimed features: deleting the created packet flow context for said multicast/broadcast multimedia service or group of terminals identified by said packet flow identifier (see, "deleting a mobile station PDP context at SGSN node", col. 5, lines 34-47), wherein said deletion comprises receiving a packet flow context request including the packet flow identifier and transmitting a response to the packet flow context request (see, "modify context message" and "modify Ack message response", col. 5, lines 34-47).

In view of the above, the method and system for providing multicast/broadcast services of Alakoski '928, the method of providing multicast services to of Toth '068, and the method for routing data from a service request in a communication system of Gilchrist '855, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the features of Alakoski '928 with Toth '068 by incorporating the teaching features of Gilchrist '855 in order to provide modification of the PDP context when the mobile station changes to SGSN as suggested in col. 5, lines 6-14 for motivation.

8. **Claims 40, 44, 46** are rejected under 35 U.S.C. 103(a) as being unpatentable over Alakoski et al (US 2004/0073928 A1) in view of Toth et al (US 2005/0053068 A1)..

Regarding claims 41, 46, Alakoski '928 discloses a method comprising sending a packet flow identifier associated to a multicast/broadcast multimedia service (see, "service attributes for each stream, target QoS and packet filter", paragraph 0043, "broadcast service attribute", paragraph 0010, lines 3-10, see, information identifying a MBMS service associated with the context, paragraph 0012, lines 2-7, fig. 3, UE 50, SGSN 54 and GGSN 56, fig. 3 to fig. 4, see service attributes in a respective service area) or group of terminals over a Gb interface (see, Toth '068 below) to create a packet flow context for a multicast/broadcast multimedia service (see, creation of MBMS contexts based on the target QoS, packet filter, paragraph 0043, fig. 3, to fig. 4, see steps leading the creation of MBMS contexts based on service attributes) or group of terminals and transferring service data of the multicast/broadcast multimedia service

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over the Gb interface by utilizing the packet flow context (see, transmission of data (i.e. MBMS contexts) over any interface, paragraph 0037, 0040).

Regarding claim 44, Alakoski '928 discloses the method, wherein sending said packet flow identifier comprises transmitting a packet flow context request to a radio access network performing said creation (fig. 3, see step of receiving the Activation MBMS context over the Radio Access network 52 and subsequent creation of the MBMS context (i.e. elements 108, 109).

Alakoski '928 discloses all the claimed limitations as set forth above with the exception of claimed features:

Regarding claims 41, 46, the Gb interface, transferring service data of the multicast/broadcast multimedia service over the Gb interface by utilizing the packet flow context.

However, Toth '068 from the same field of endeavor discloses the above claimed features:

Regarding claim 41, Gb interface (fig. 1, see lu/Gb interface communicatively the SGSN node to the Radio Access network in which group of mobile terminals connects, paragraph 0050), transferring service data of the multicast/broadcast multimedia service (see, reception/transmission of multicast data context, paragraphs 0046, 0048, 0052, 0071, 0079-0081, 0095-0096) over Gb interface (fig. 1, see lu/Gb interface communicatively the SGSN node to the Radio Access network in which group of mobile terminals connects, paragraph 0050).

In view, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching features of Alakoski '928 by incorporating teaching features (i.e. Gb interface) as taught by Toth '068 in order to transmit MBMS service data context over the Gb interface which in turn provides the highest possible access rates in relation to the bandwidth.

9. **Claims 35-36, 42-43, 45, 47-48** are rejected under 35 U.S.C. 103(a) as being unpatentable over Alakoski et al (US 2004/0073928 A1) in view of Toth et al (US 2005/0053068 A1) as applied to claims 41, 46 above, and further in view of Eriksson et al (US 2002/0114279 A1).

Alakoski '928 discloses controlling QoS (i.e. maximum allowable QoS) of MBMS PDP context by the GGSN node, paragraphs 0029, 0032.

Alakoski '928 in view of Toth '068 discloses all the claimed limitations as set forth above with the exception of claimed features:

Regarding claims 35, 42, 47, the method, further comprising performing a flow control of the service data of the multicast/broadcast multimedia service on packet flow context and base station system general packet radio service protocol virtual connection levels.

Regarding claims 36, 43, 48, the method, wherein said flow control is additionally performed on a level located between said packet flow context and base

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station system general packet radio service protocol virtual connection levels, said level comprising at least one block whereto at least one packet flow context is logically connected.

Regarding claim 45, the method, wherein a part of plural flow control parameters are received from a base station subsystem or gateway general packet radio service support node.

However, Eriksson '279 from the same field of endeavor disclose the above claimed features:

Regarding claims 35, 42, 47, the method, further comprising performing a flow control of the service data ("control of data flows", recited in paragraph 0019, lines 1-10) of the multicast/broadcast multimedia service (see, Alakoski '928) on packet flow context and base station system general packet radio service protocol virtual connection levels (fig. 3, Flow Control Per BVC, recited in paragraph 0022, lines 1-12).

Regarding claims 36, 43, 48, wherein said flow control is additionally performed on a level (fig. 3, Flow Control per MS, recited in paragraph 0015, lines 1-7) located between said packet flow context (fig. 3, PFC Flow Control) and base station system general packet radio service protocol virtual connection levels (fig. 3, BVC Flow Control, see BSS control of the data flow, paragraph 0015) said level comprising at least one block (fig. 1, MS Flow block connecting to PFC block) whereto at least one packet flow context is logically connected (fig. 1, MS Flow block connecting to PFC block).

Regarding claim 45, wherein a part of plural flow control parameters are received from a Base Station Subsystem (see, BSS control of data flow, paragraphs 0019, 0022, fig. 3, Flow Control per BVC to SGSN node from the BSS).

In view of the above, having the combined teaching features of Alakoski '928 in view of Toth '068 and the method for controlling data flow per BVC of Eriksson '279, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching features of Alakoski '928 in view of Toth '068 by incorporating the teaching features of Eriksson '279 in order to provide flow control per packet flow context in GPRS network as suggested in paragraph 0014 for motivation.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hsu et al (US 2003/0141064 A1) and Kavanagh et al (US 2003/0081607 A1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CANDAL ELPENORD whose telephone number is (571)270-3123. The examiner can normally be reached on Monday through Friday 7:30AM to 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang Bin Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Examiner, Art Unit 2416

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